

FIG. 1

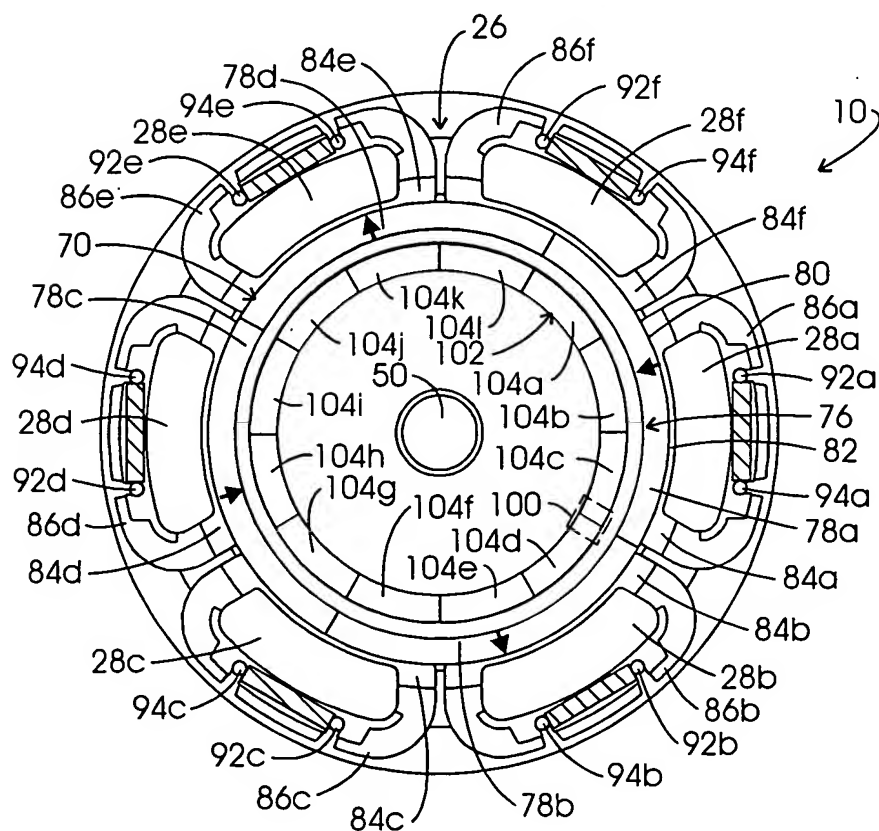


FIG. 2

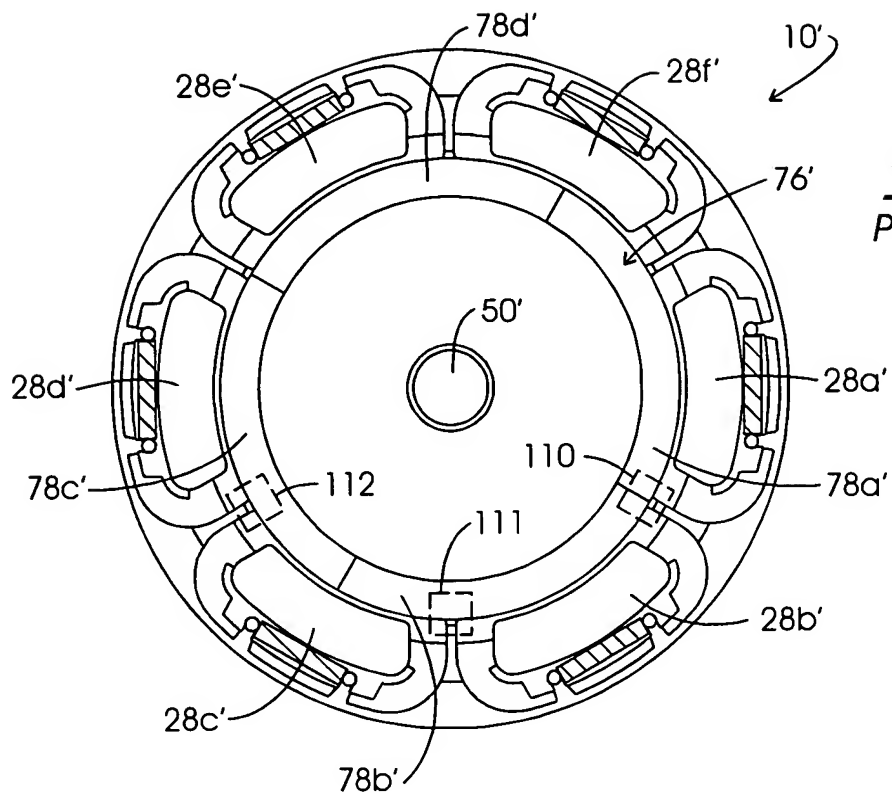


FIG. 3  
PRIOR ART

		STEP					
		0	1	2	3	1	
I	Q	0	0	1	1	0	
	$\bar{Q}$	1	1	0	0	1	
II	Q	0	0	0	1	0	
	$\bar{Q}$	1	1	1	0	1	

FIG. 11

		<u>CW</u>	
		STEP	PHASE
	0	C	
	1	A	
	2	B	
	3	C	
	1	A	

FIG. 5

		<u>CCW</u>	
		STEP	PHASE
	0	C	
	1	B	
	2	A	
	3	C	
	1	B	

FIG. 6

		<u>CW</u>	
		STEP	PHASE
	0	B	
	1	A	
	2	C	
	3	B	
	1	A	

FIG. 8

		<u>CCW</u>	
		STEP	PHASE
	0	B	
	1	C	
	2	A	
	3	B	
	1	C	

FIG. 9







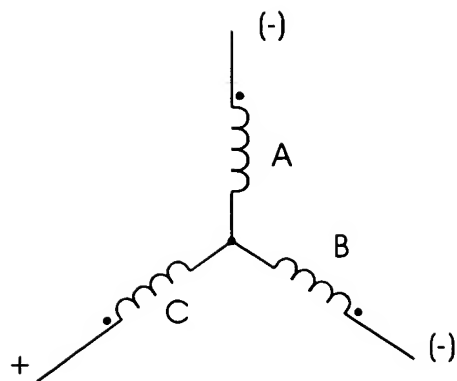


FIG. 12

CW		
STEP	TOP	BOTTOM
0	C	A B
1	A	B
2	A	C
3	B	C
4	B	A
5	C	A
6	C	B

FIG. 13

CCW		
STEP	TOP	BOTTOM
0	C	A B
1	B	A
2	B	C
3	A	C
4	A	B
5	C	B
6	C	A

FIG. 14

FIG. 16

		ALIGNING STEP						
		STEP						
		0	1	2	3	4	5	6
I	Q	0	0	1	1	1	0	0
	$\bar{Q}$	1	1	0	0	0	1	1
II	Q	0	0	0	1	1	1	0
	$\bar{Q}$	1	1	1	0	0	0	1
III	Q	0	0	0	0	1	1	1
	$\bar{Q}$	1	1	1	1	0	0	0

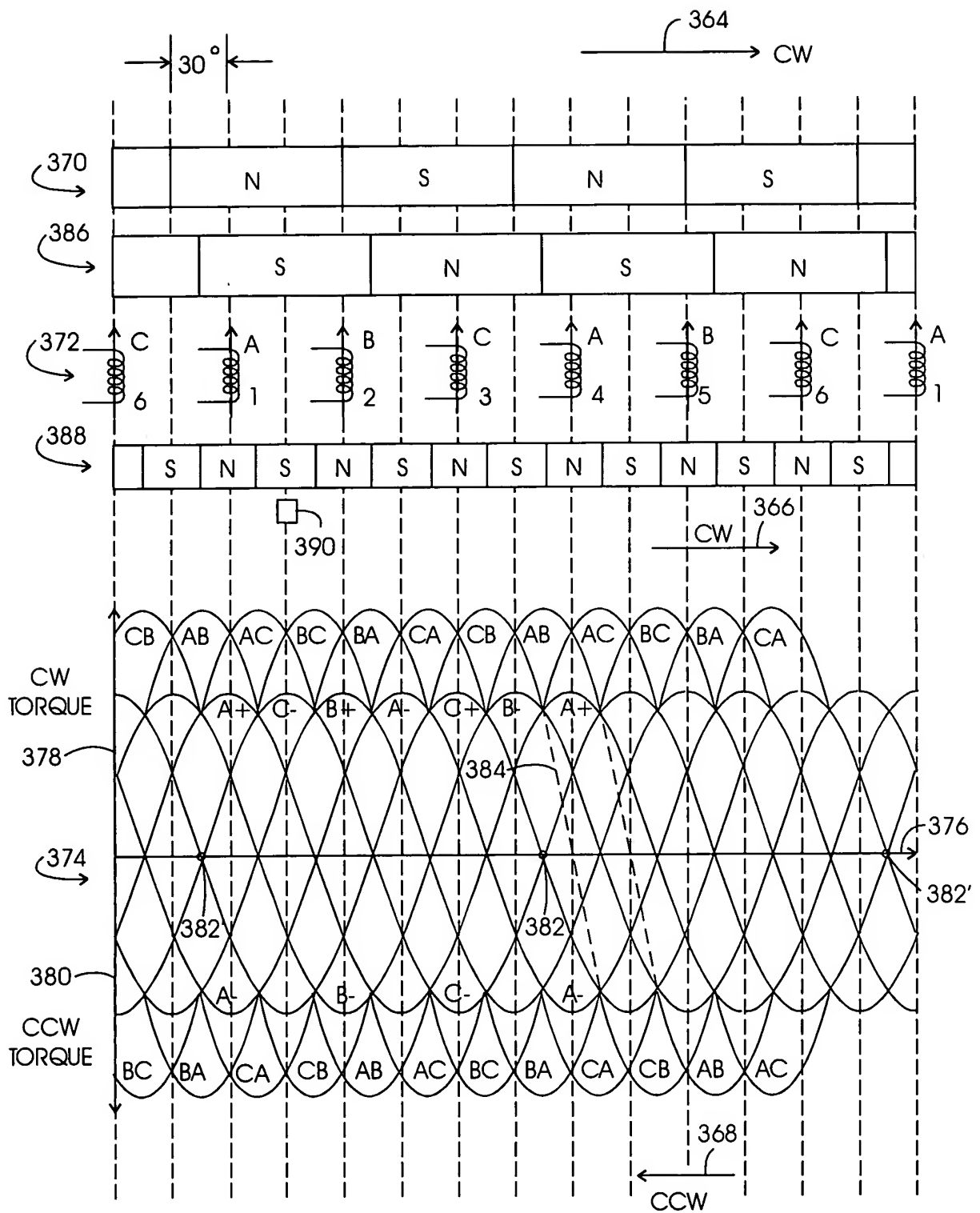
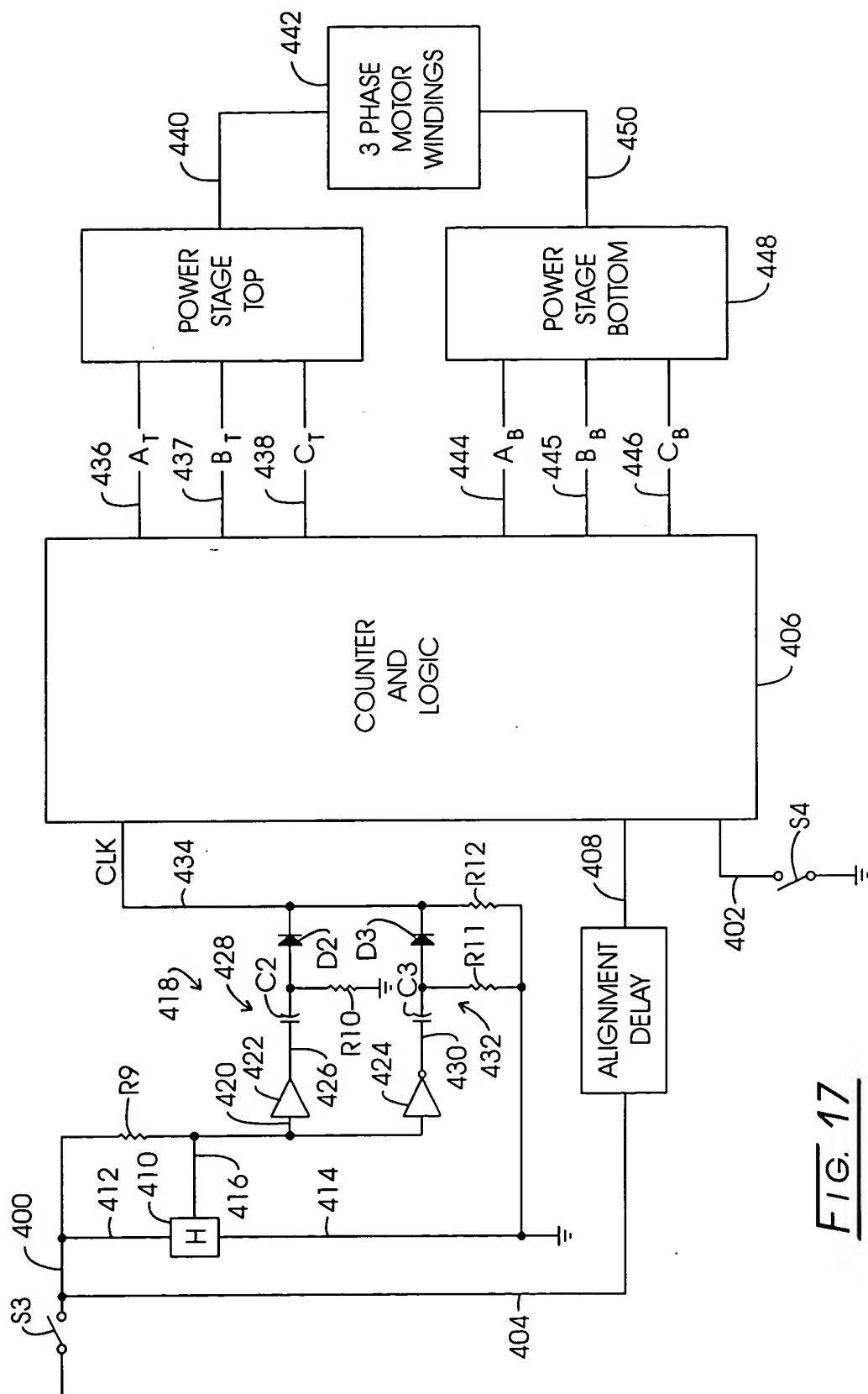


FIG. 15



**FIG. 17**





CW	
STEP	PHASE ON
0	C
1	D
2	A
3	B
4	C
5/1	D

FIG. 19

CCW	
STEP	PHASE ON
0	C
1	B
2	A
3	D
4	C
5/1	B

FIG. 20

I						
STEP	0	1	2	3	4	1
Q	0	0	1	1	0	0
$\bar{Q}$	1	1	0	0	1	1
D	1	1	1	0	0	1

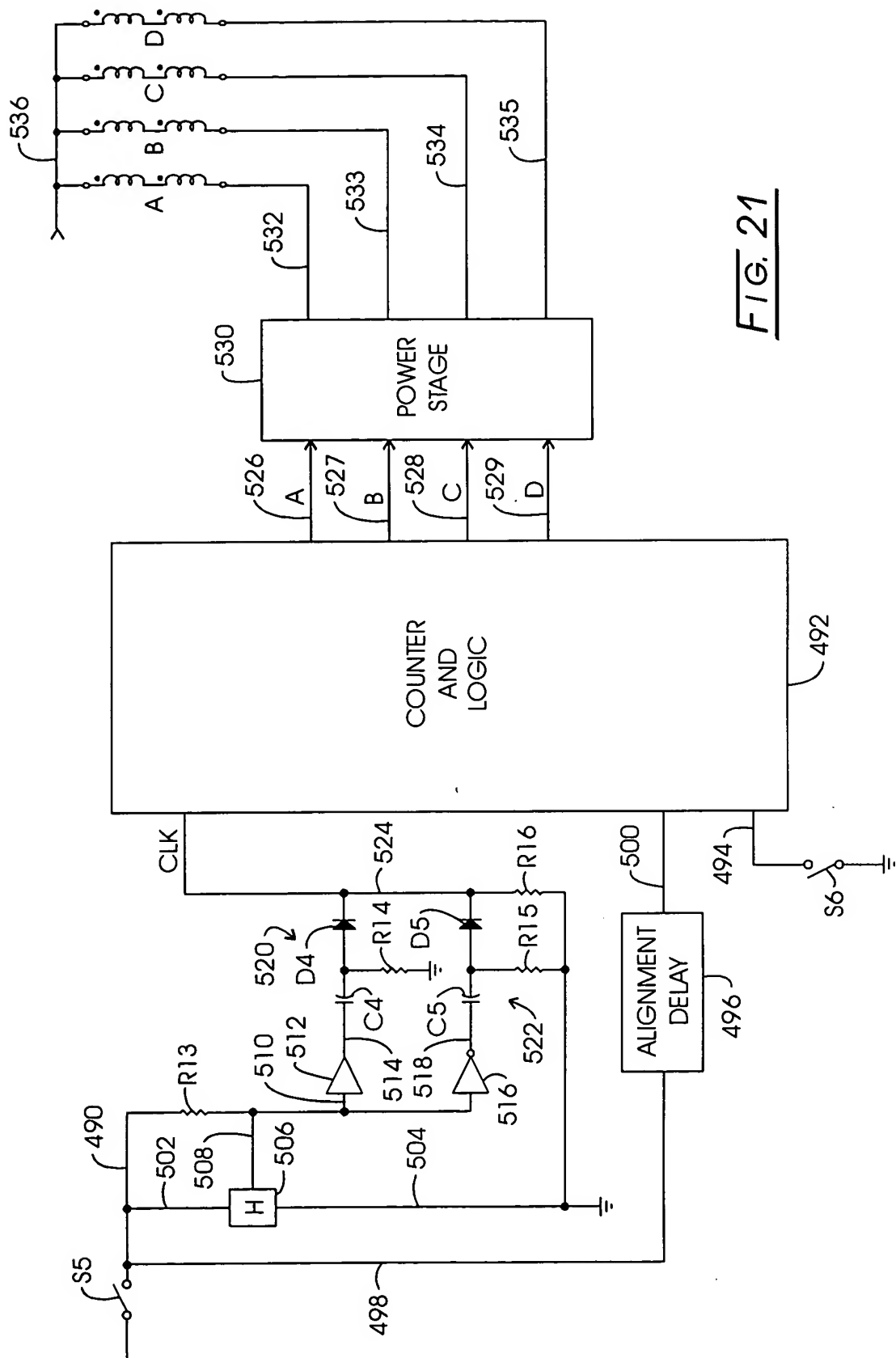
FIG. 22

II						
STEP	0	1	2	3	4	1
Q	0	0	0	1	1	0
$\bar{Q}$	1	1	1	0	0	1
D	0	0	1	1	0	0

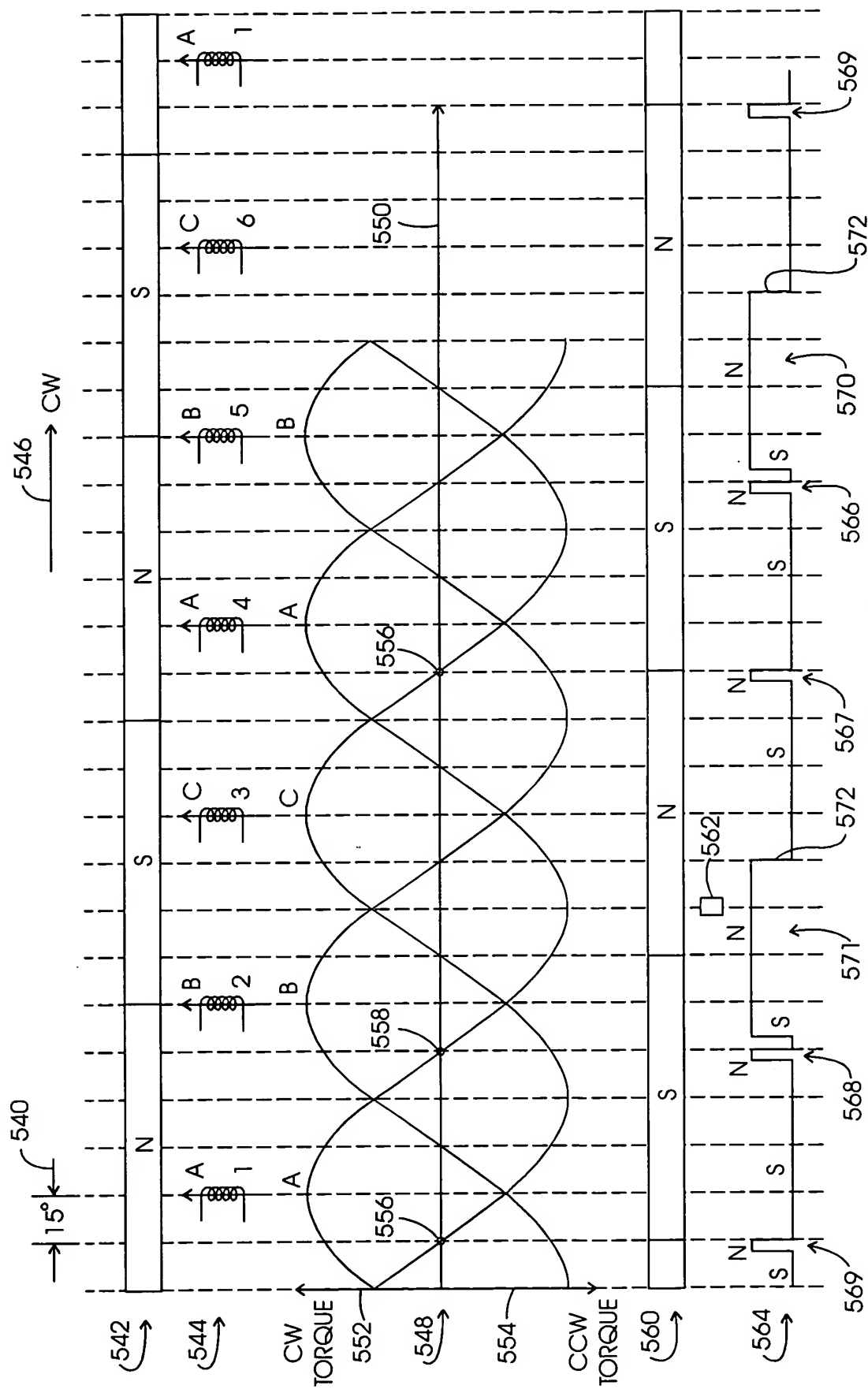
FIG. 23

CW	
STEP	PHASE ON
0	C
1	A
2	B
3	C
4→1	A

FIG. 25



**FIG. 21**



**FIG. 24**

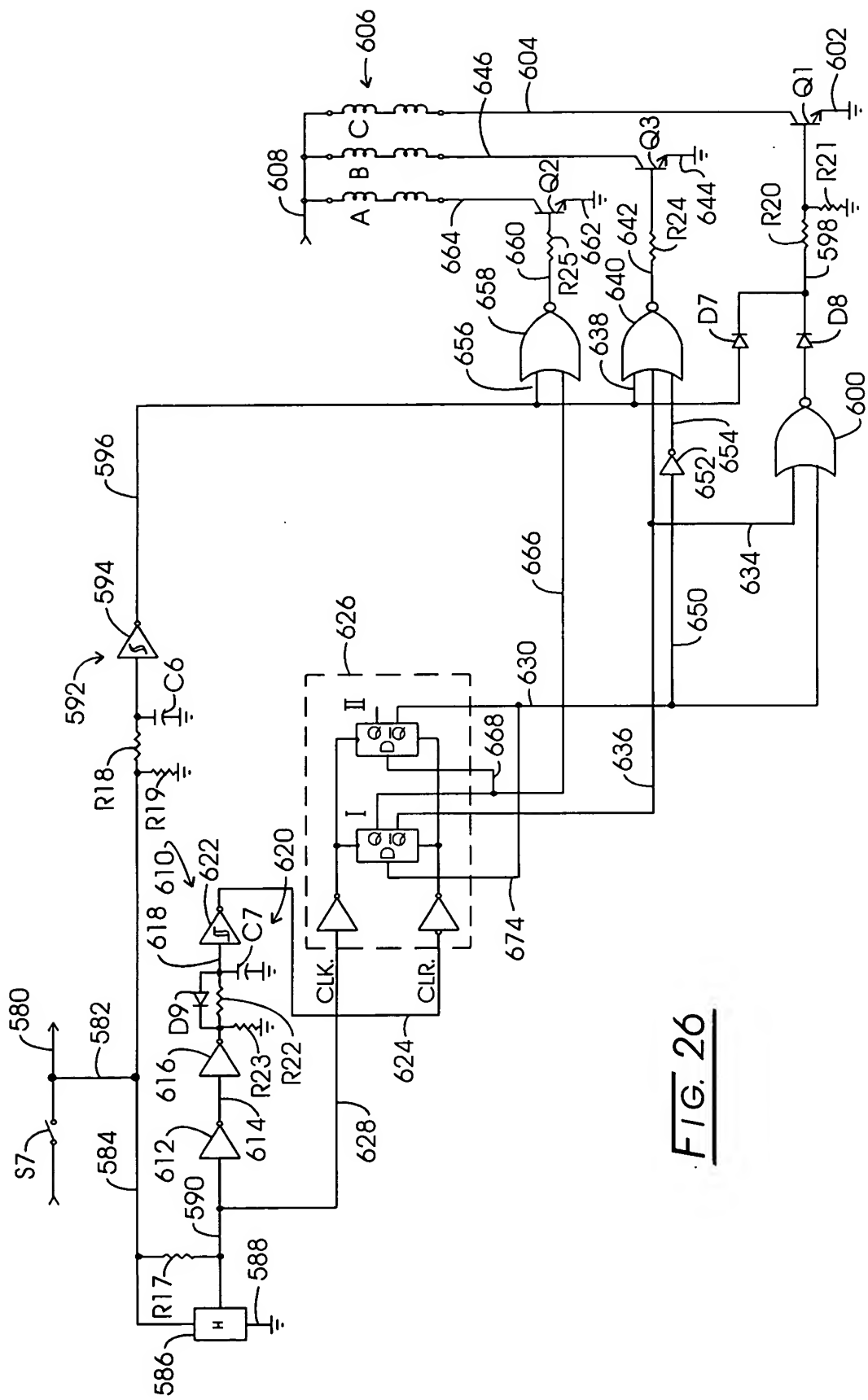


FIG. 26

ALIGNMENT					CLR.		
STEP	0	1	2	3	4→1	2	
I	Q	0	0	1	1	0→0	1
	$\overline{Q}$	1	1	0	0	1→1	0
II	Q	0	0	0	1	1→0	0
	$\overline{Q}$	1	1	1	0	0→1	1
MOTOR PHASE	C	A	B	C	A	B	

FIG. 27

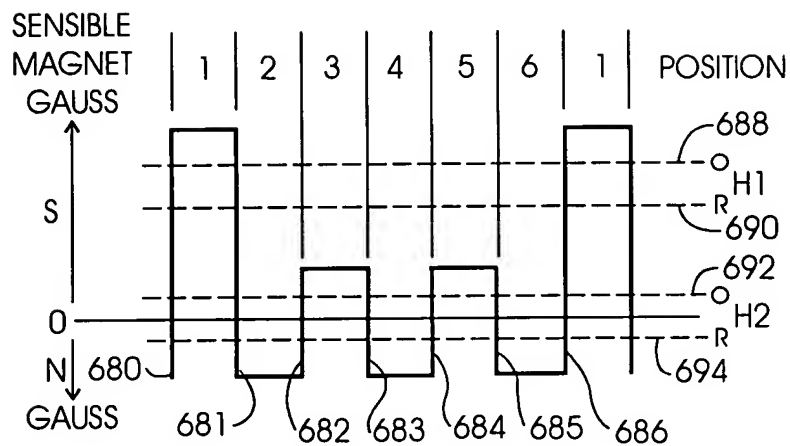


FIG. 28

POSITION	1	2	3	4	5	6	1
H1	0	1	1	1	1	1	0
H2	0	1	0	1	0	1	0

FIG. 28A

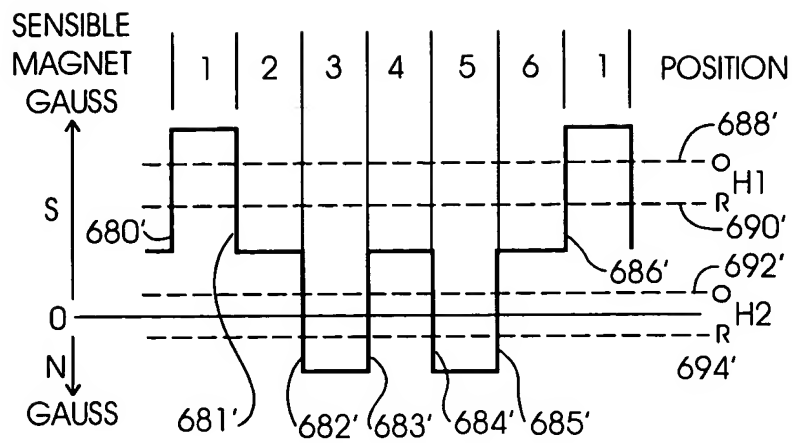


FIG. 28B

POSITION	1	2	3	4	5	6	1
H1	0	1	1	1	1	1	0
H2	0	0	1	0	1	0	0

FIG. 28C

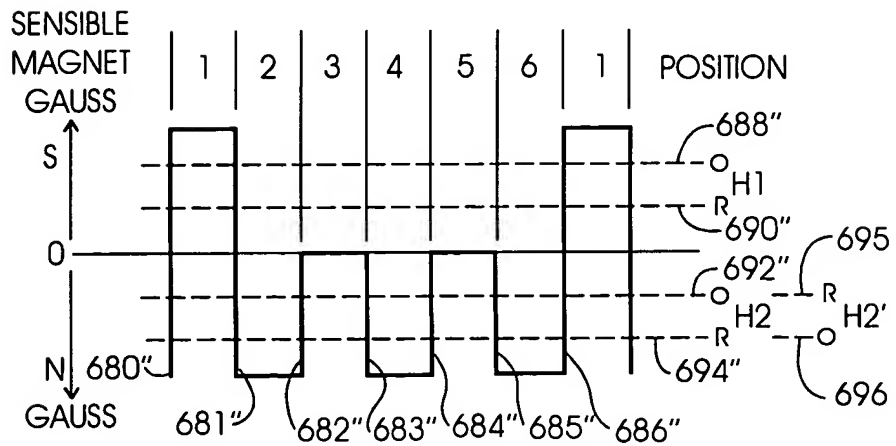


FIG. 28D

POSITION	1	2	3	4	5	6	1
H1	0	1	1	1	1	1	0
H2	0	1	0	1	0	1	0
H2'	1	0	1	0	1	0	1

FIG. 28E

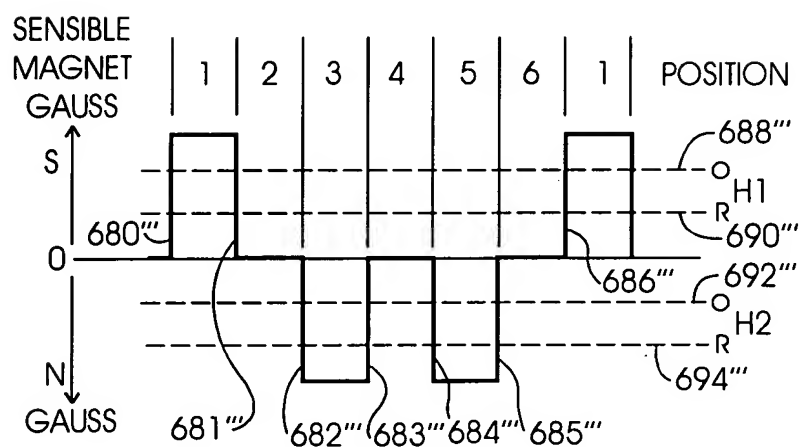


FIG. 28F

POSITION	1	2	3	4	5	6	1
H1	0	1	1	1	1	1	0
H2	0	0	1	0	1	0	0

FIG. 28G



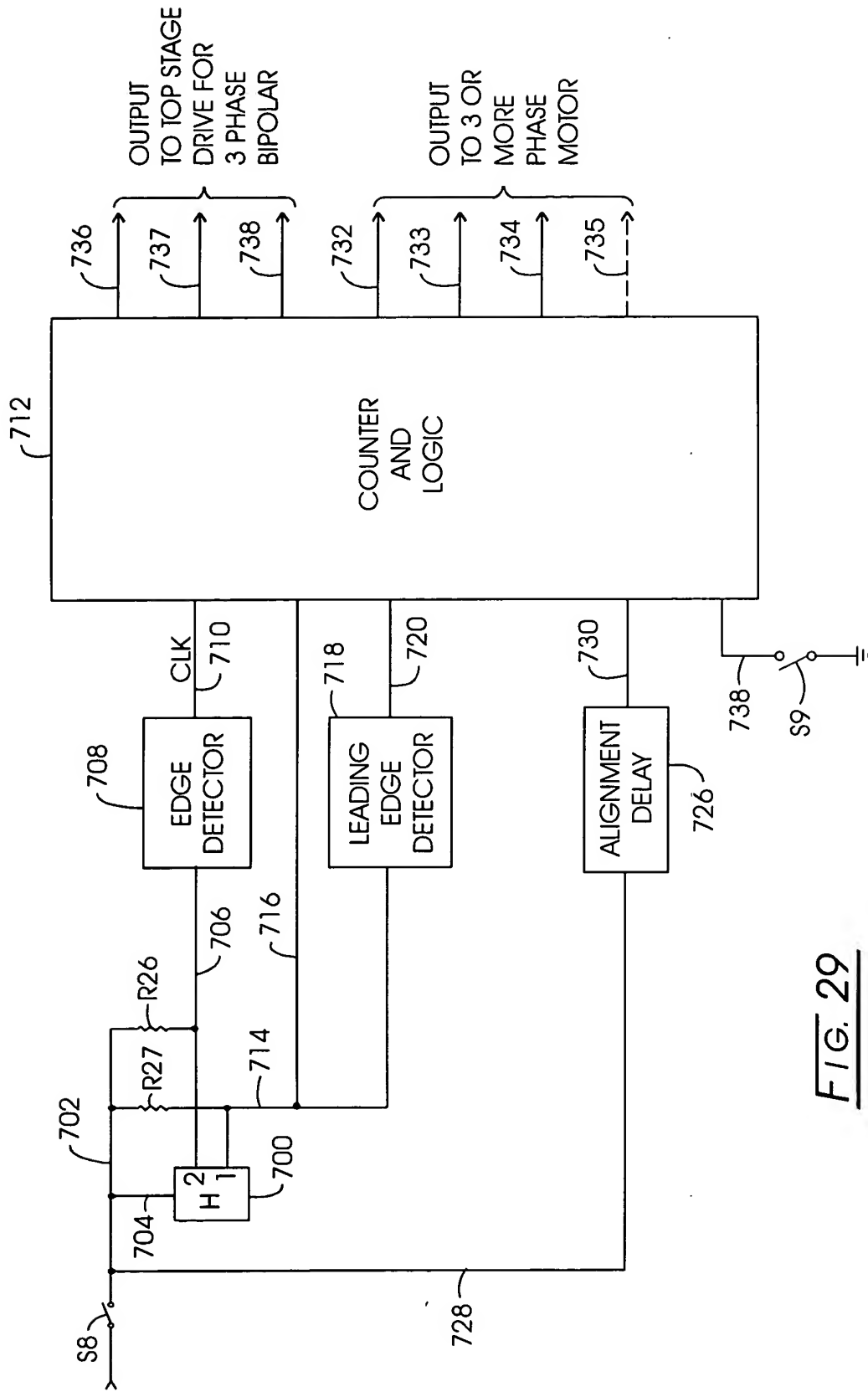


FIG. 29

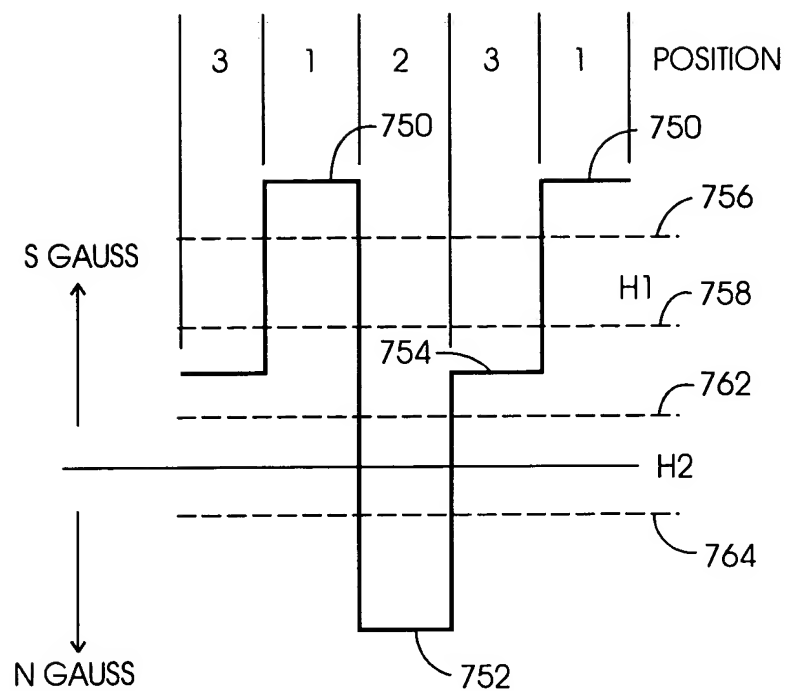


FIG. 30A

POSITION	1	2	3
H <sub>1</sub>	0	1	1
H <sub>2</sub>	0	1	0
PHASE	A	B	C

FIG. 30B



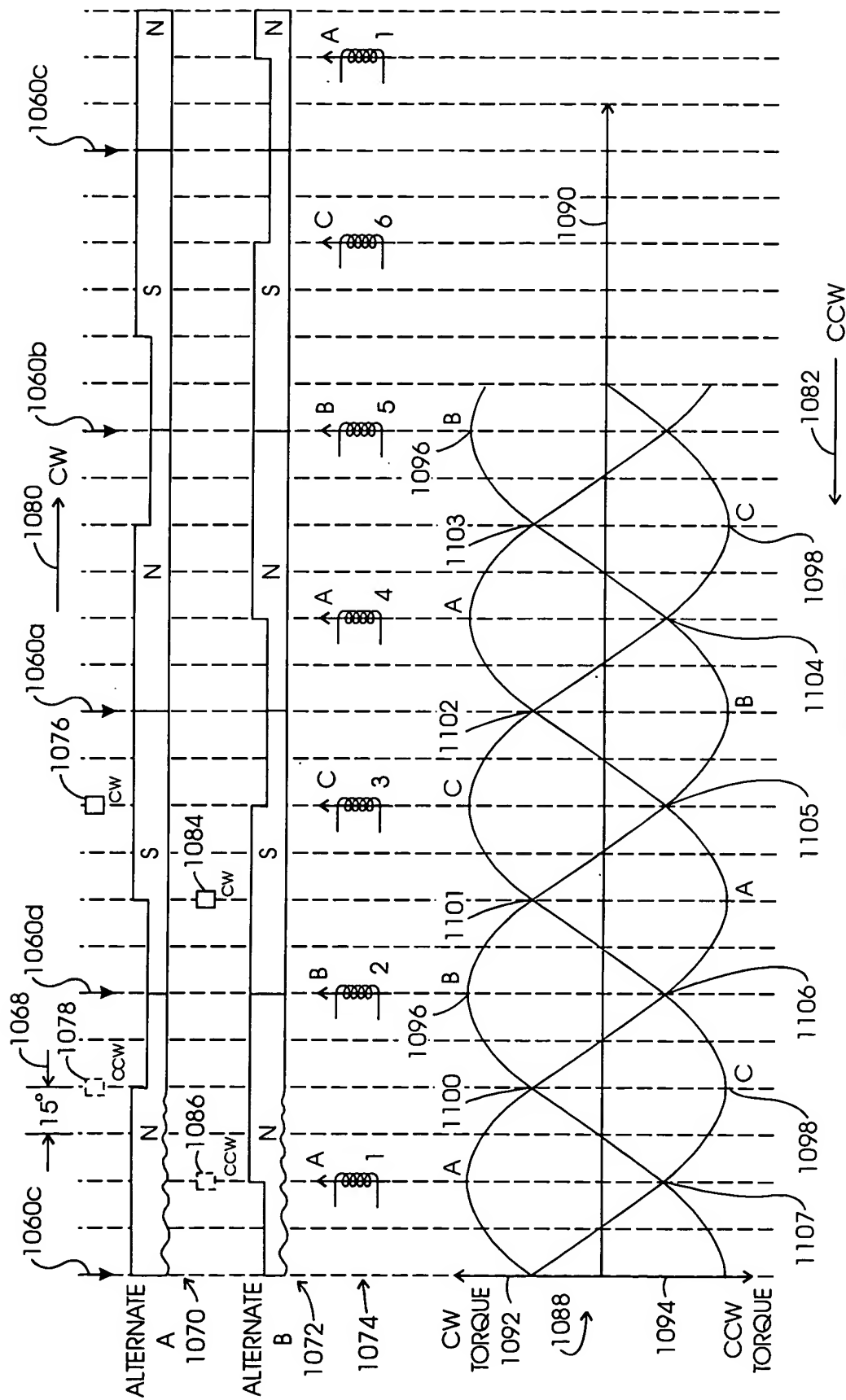


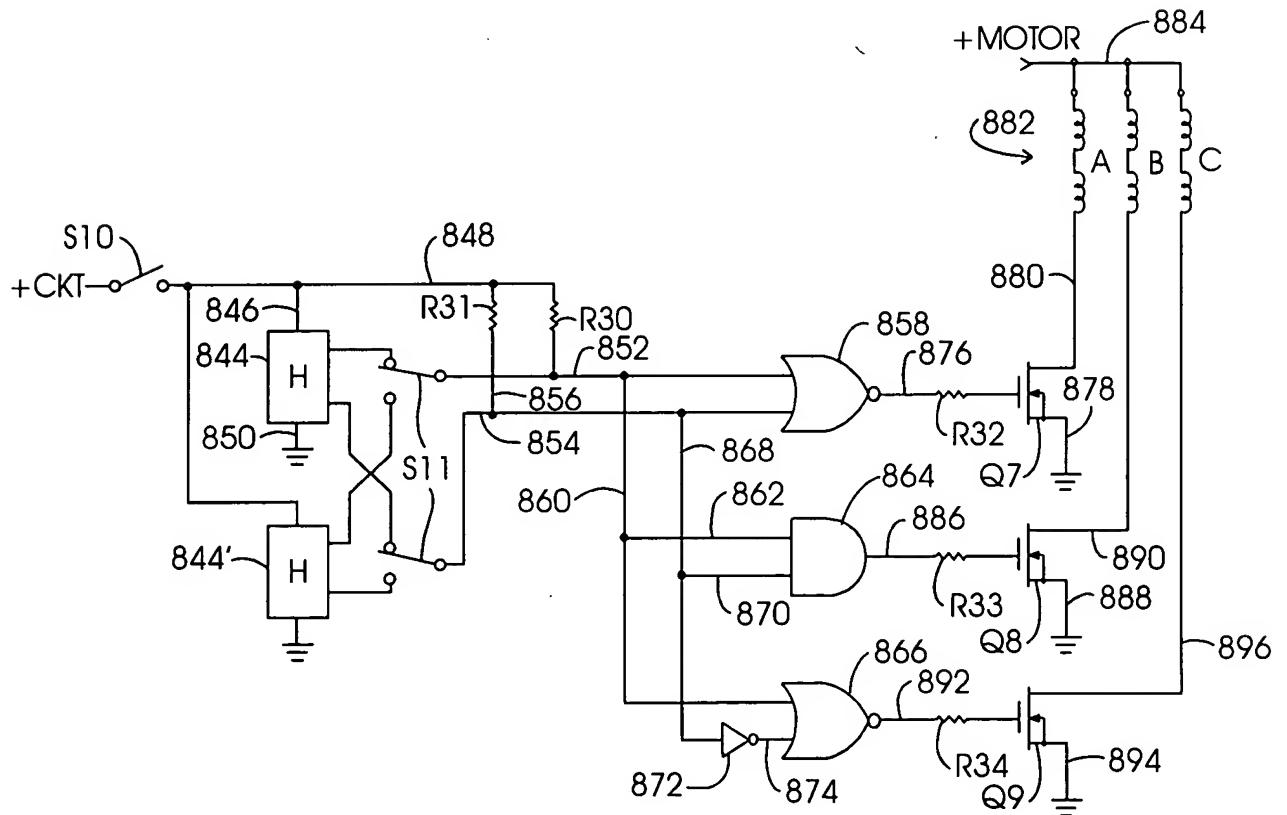
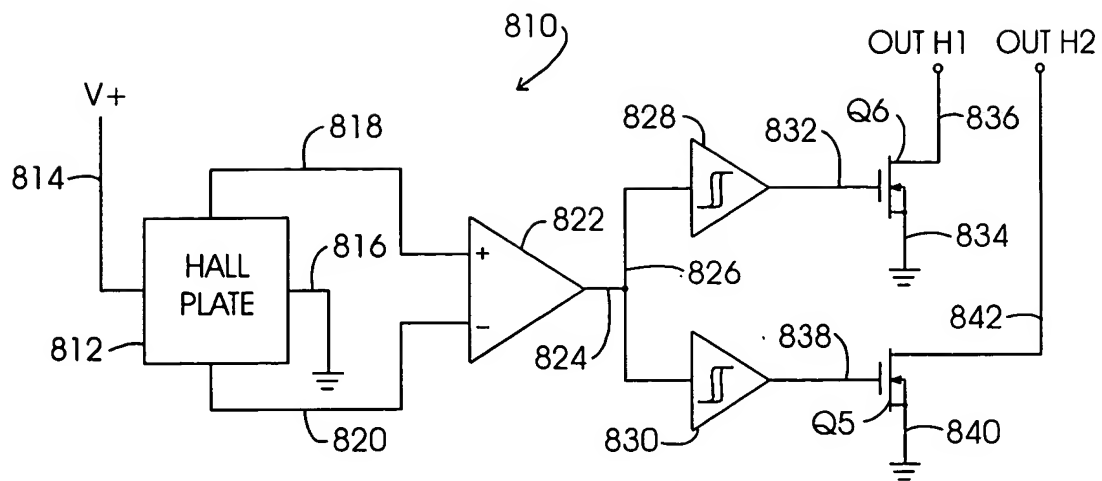
FIG. 31A

ALTERNATE B			
CW	CCW		
S - B	N - C		
N - C	S - B		
O - A	O - A		
S - B	N - C		

FIG. 31B

FIG. 31C

ALTERNATE A			
CW	CCW		
S - B	O - C		
O - C	S - B		
N - A	N - A		
S - B	O - C		



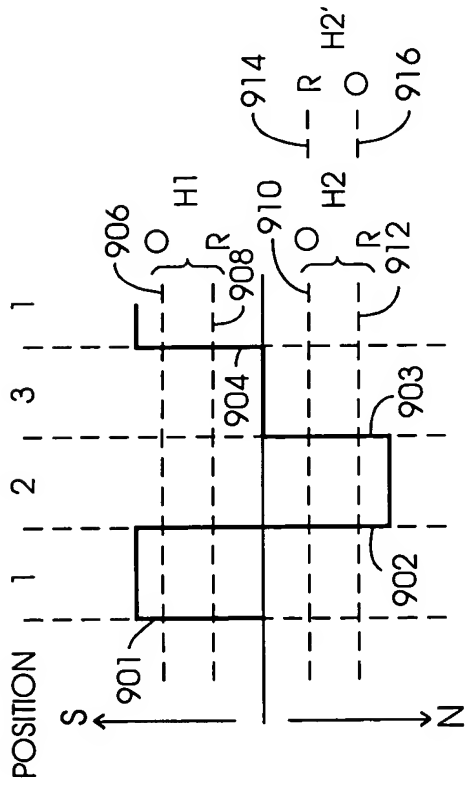


FIG. 34

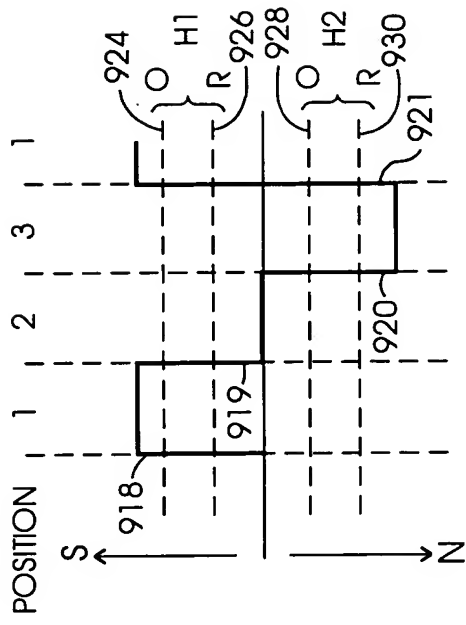


FIG. 36

POSITION	1	2	3	1
H1	0	1	1	0
H2	0	1	0	0
H2'	1	0	1	1
PHASE	A	B	C	A

FIG. 35

POSITION	1	2	3	1
H1	0	1	1	0
H2	0	0	1	1
PHASE	A	B	C	A

FIG. 37

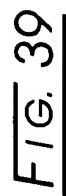
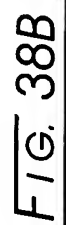


FIG. 40

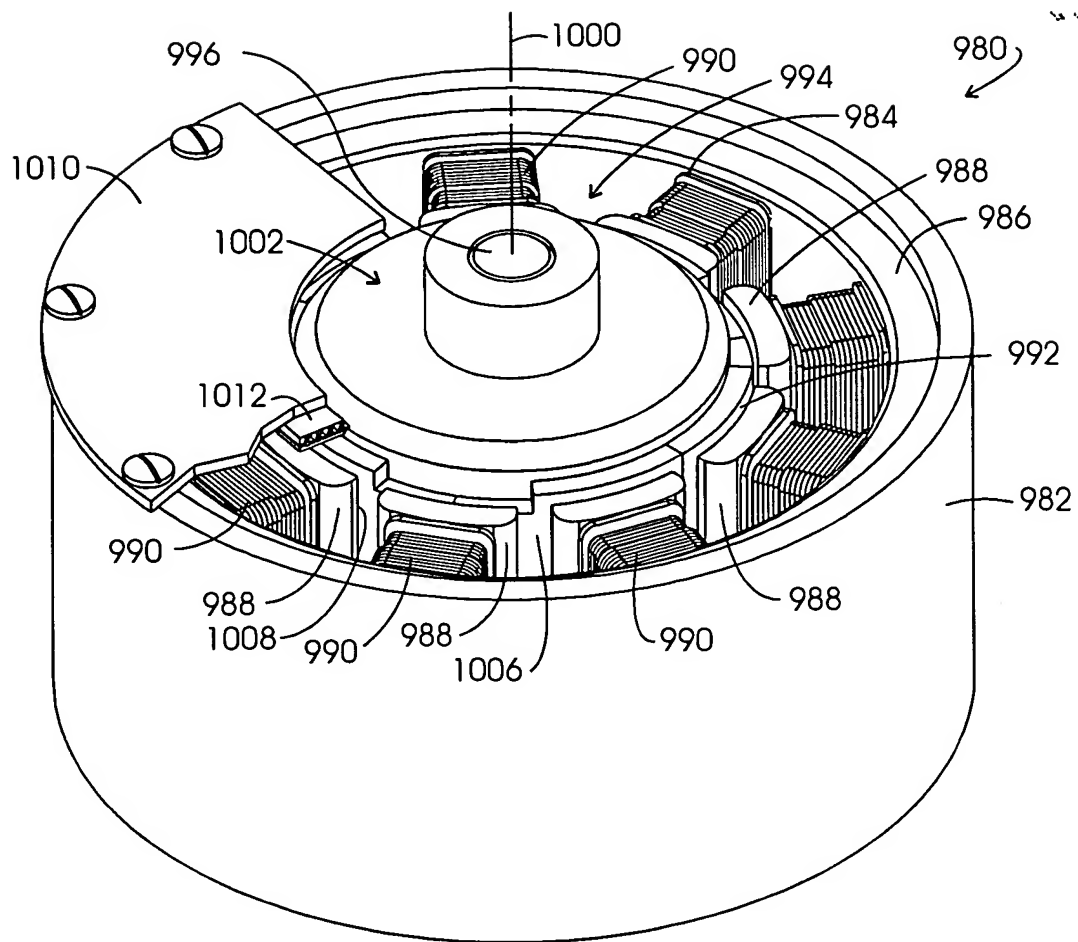


FIG. 41

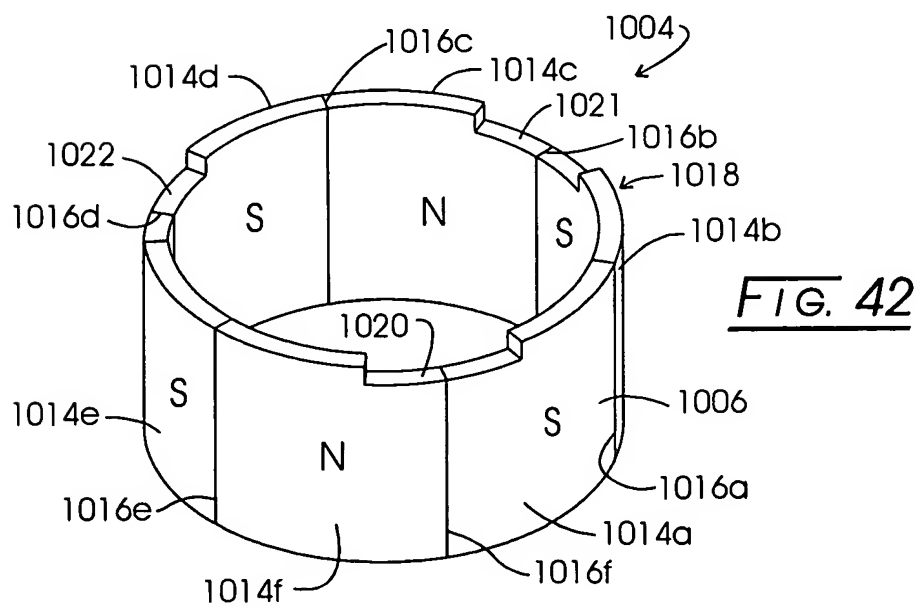


FIG. 42



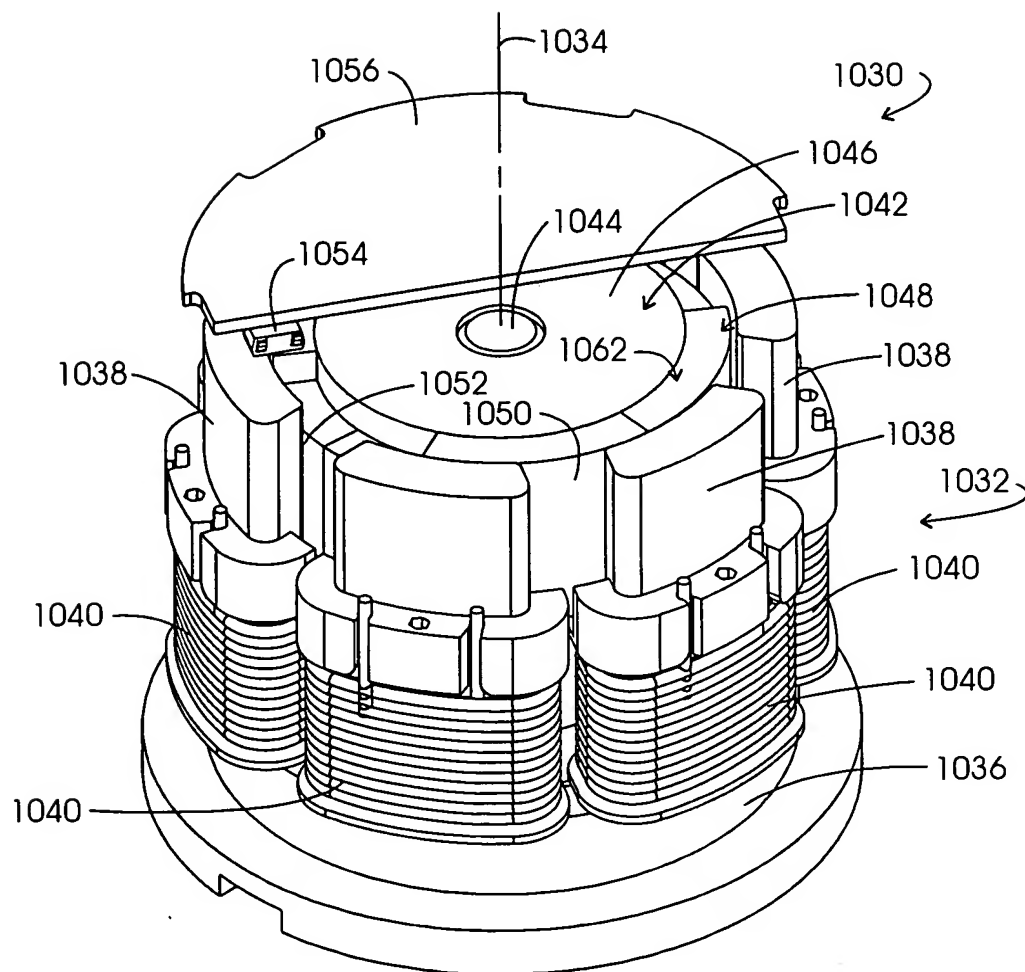


FIG. 43

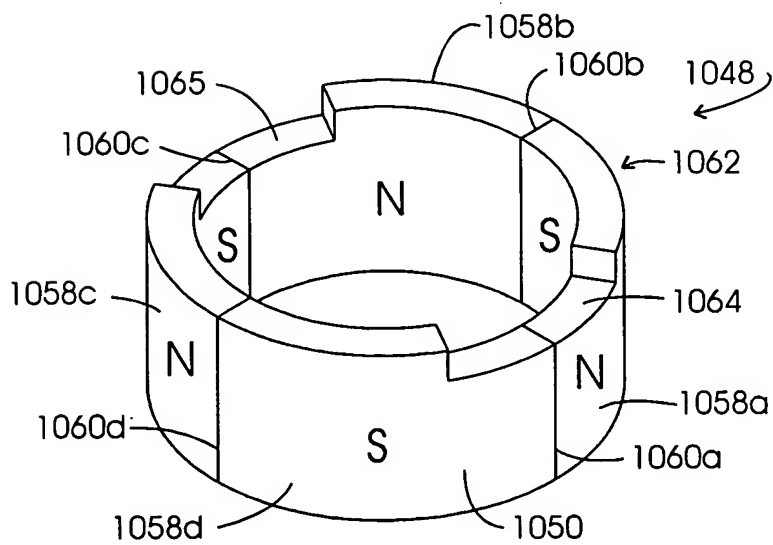


FIG. 44

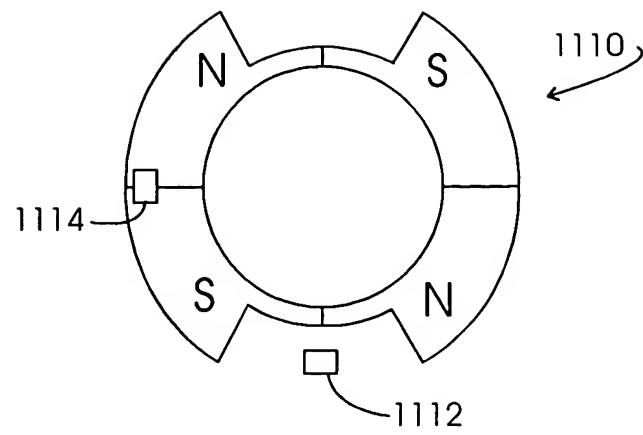


FIG. 45

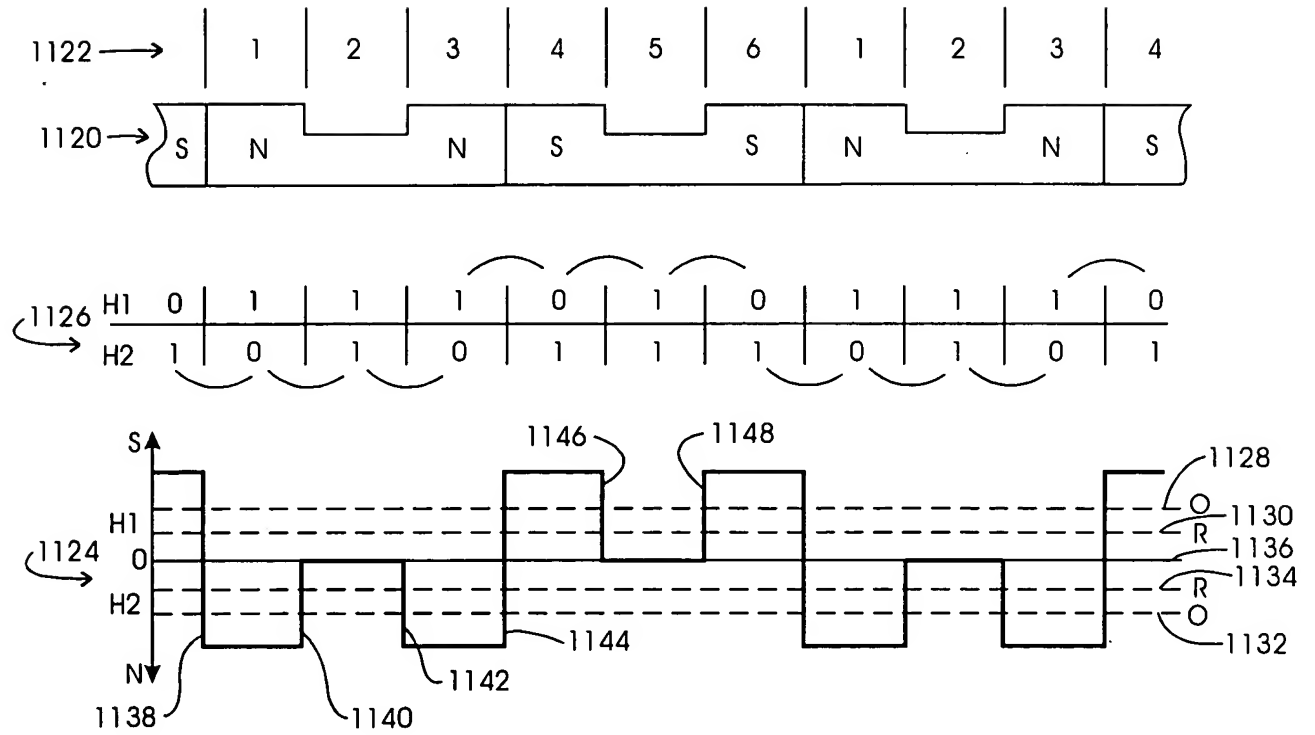


FIG. 46

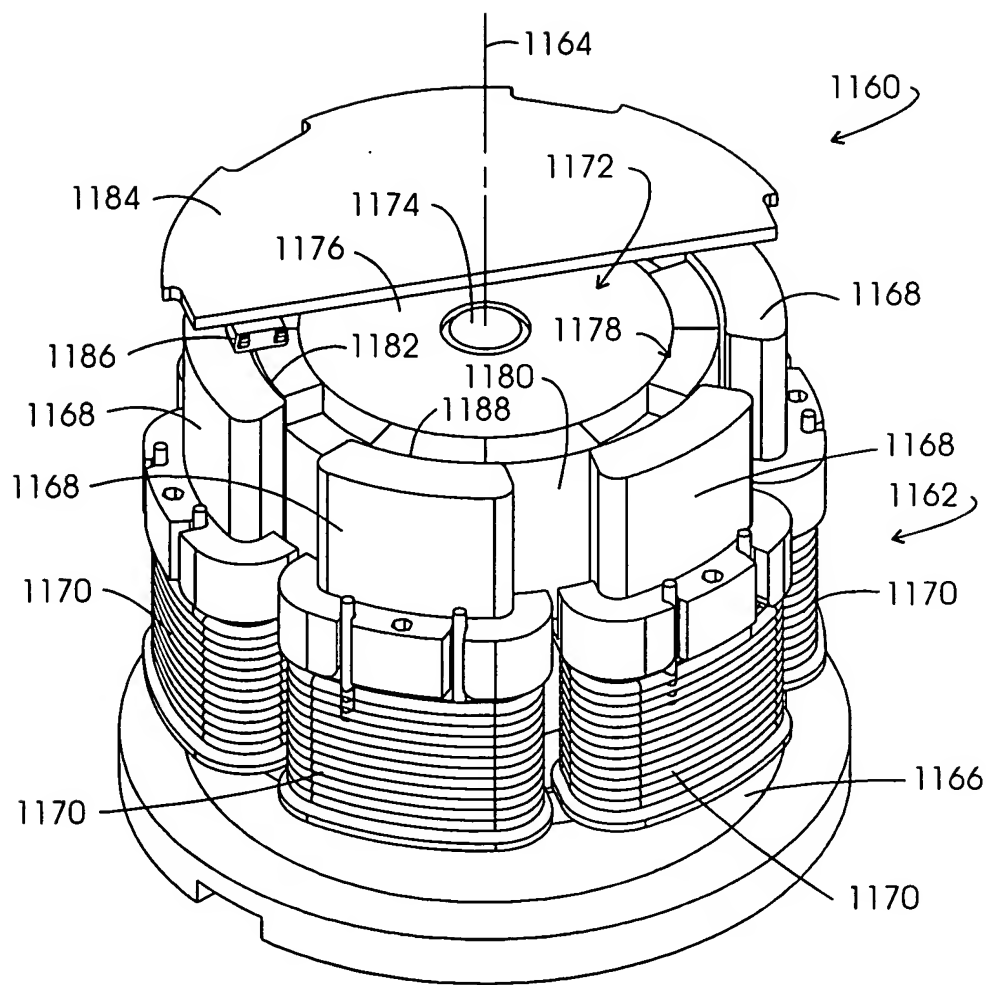


FIG. 47

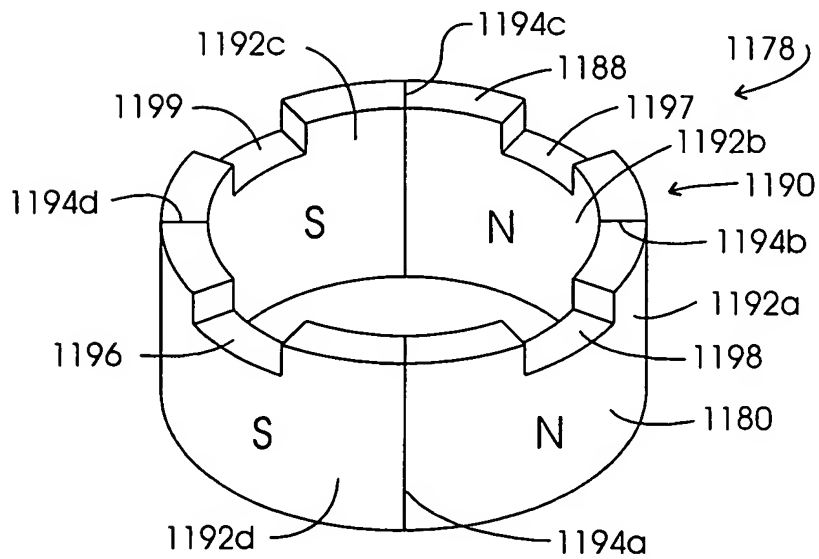


FIG. 48